

# A PLAN FOR OCEAN RESEARCH IN THE COMING DECADE



SUBCOMMITTEE ON OCEAN SCIENCE AND TECHNOLOGY  
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

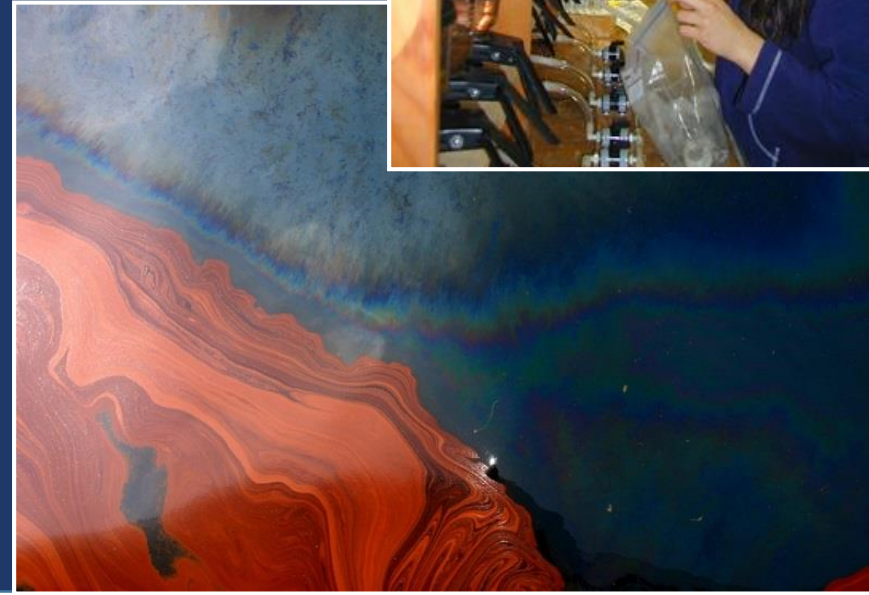


# OVERVIEW

The ocean plays a central role in the global cycles that sustain all life on Earth...  
...yet is vulnerable to human activities leading to environmental, cultural, and economic losses.

Scientific advances will further understanding of the ocean and its relationship with society.

Application of that knowledge will allow for more sustainable use of marine resources while maintaining ocean health.



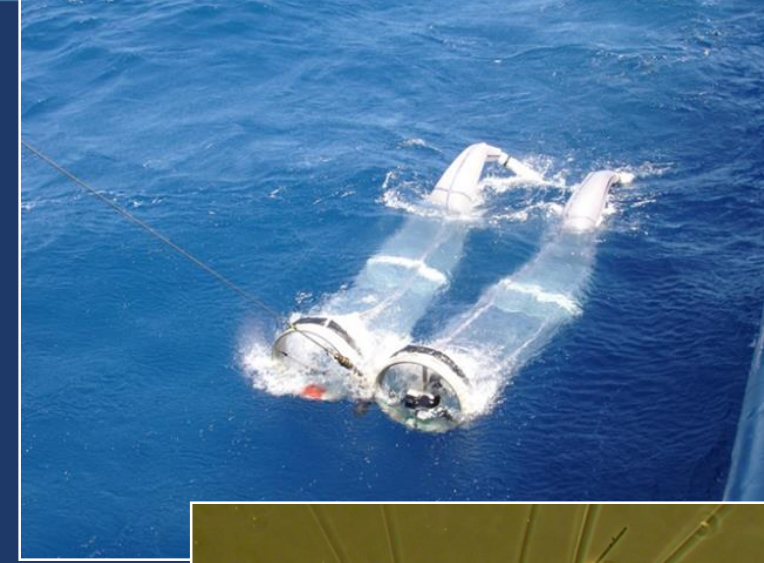
# THE PLAN

The SOST is initiating development of a 10-year ocean<sup>1</sup> research plan.

Purpose: To provide up-to-date, cohesive, and strategic guidance for the Federal ocean S&T enterprise<sup>2</sup> **informed by and in alignment with the ocean S&T community and science-based information needs of resource managers, policy-makers, educators, and stakeholders.**

<sup>1</sup>Ocean includes the open ocean, coasts, estuaries, coastal watersheds, and Great Lakes.

<sup>2</sup>Ocean science and technology enterprise encompasses basic, inquiry-driven, fundamental research; applied science and research driven by societal and management needs; the translation and application of research results; technology, tools, and infrastructure; innovation; education and workforce development; social sciences as related to ocean issues; and operational oceanography.





# THE PLAN

The Plan will:

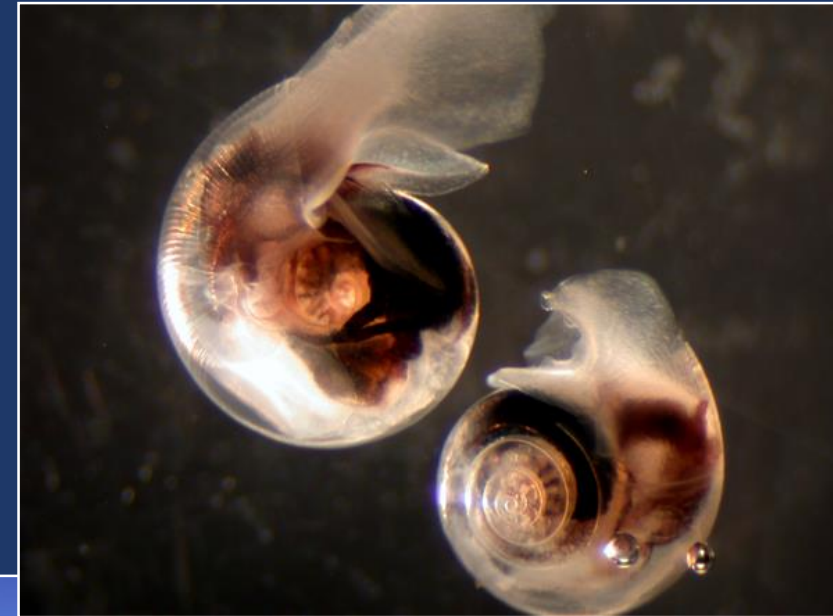
- Describe pressing research questions and promising areas of opportunity within the ocean S&T enterprise.
- Set the stage for actions across Federal agencies and with non-Federal entities.
- Guide alignment of resources to support high priority research.

The Plan will not:

- Cover all ocean issues.
- Prescribe policies.

Target Audience:

- Public sector
- Scientists
- Private/for-profit sector
- Environmental interest groups
- Ocean stakeholders
- International entities
- General public



# PLAN PROSPECTUS

Plan Prospectus outlines:

- Purpose and intended uses
- Proposed structure and content
- Development and review
- Opportunities for stakeholder engagement

SOST not seeking comments on the prospectus, but using it to stimulate feedback from the public on the overall framing and content of the Plan.





# GUIDING PRINCIPALS

Represent the qualities of the ocean S&T research enterprise, independent of specific research areas.

Proposed Guiding Principles include:

- Education and Workforce
- Inquiry and Advancement
- Flexibility
- Capabilities and Capacity
- Innovation
- Connectivity and Coordination
- Balance

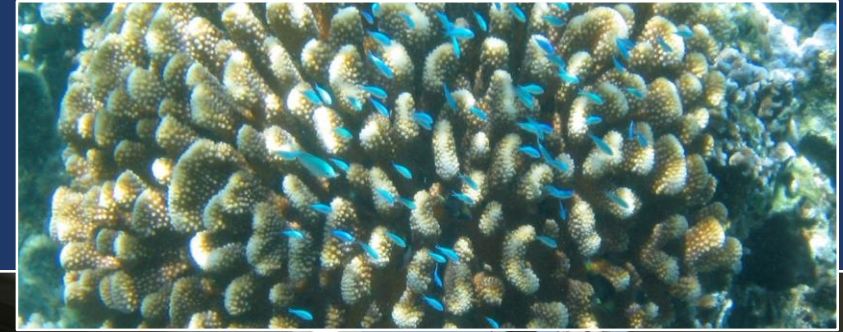


# SOCIETAL THEMES

Provide high-level impetus for topics included in the Plan and answer the question “Why conduct ocean research?”

Examples of potential Societal Themes:

- Resource Availability and Sustainable Use
- Ocean Ecosystems
- Relationship between the Ocean and Human Health
- Ocean’s Role in Earth and Atmospheric Processes
- Economy and Social Well-being
- Protection and Resilience of Coastal Communities
- Marine Operations and National Security





# RESEARCH GOALS

Answer the question “What ocean research is needed to address the Societal Themes?”

Examples of potential Research Goals:

- Quantify Role of the Ocean in Climate Variability
- Predict Changing Ocean Conditions
- Inform Societal Responses under Management Options
- Characterize Ocean Habitats and Biodiversity
- Improve Understanding of Human Component
- Explore Unknown Areas and Processes





# RESEARCH ACTIVITIES

- Support the Research Goals and parse them into actionable topic areas.
- Form the basis for Federal implementation.
- Will be identified once Societal Themes and Research Goals are determined.
- Will be presented in the Draft Plan for public review.



# PLAN DEVELOPMENT

Public Input Period –  
Now Open!

## Plan Authors

- Subject matter experts from SOST agencies
- Will draw on their own expertise, public input, and relevant non-Federal materials

Criteria will guide which topics will be included in the Plan.

Draft Plan will be made available for public comment.

Final Plan will be widely distributed.





# COMMUNITY ENGAGEMENT

Critical component involving:

- Academia
- Industry/for-profit entities
- Non-governmental organizations
- Local, state, and tribal governments & Regions
- Stakeholders
- Public
- International ocean-related entities
- Other Federal and non-Federal sources

Multiple opportunities to provide input:

- Request for Information period – **RIGHT NOW!**
- Public Comment period on Draft Plan – Anticipated Spring 2017
- Conferences, meetings, webinars – Throughout



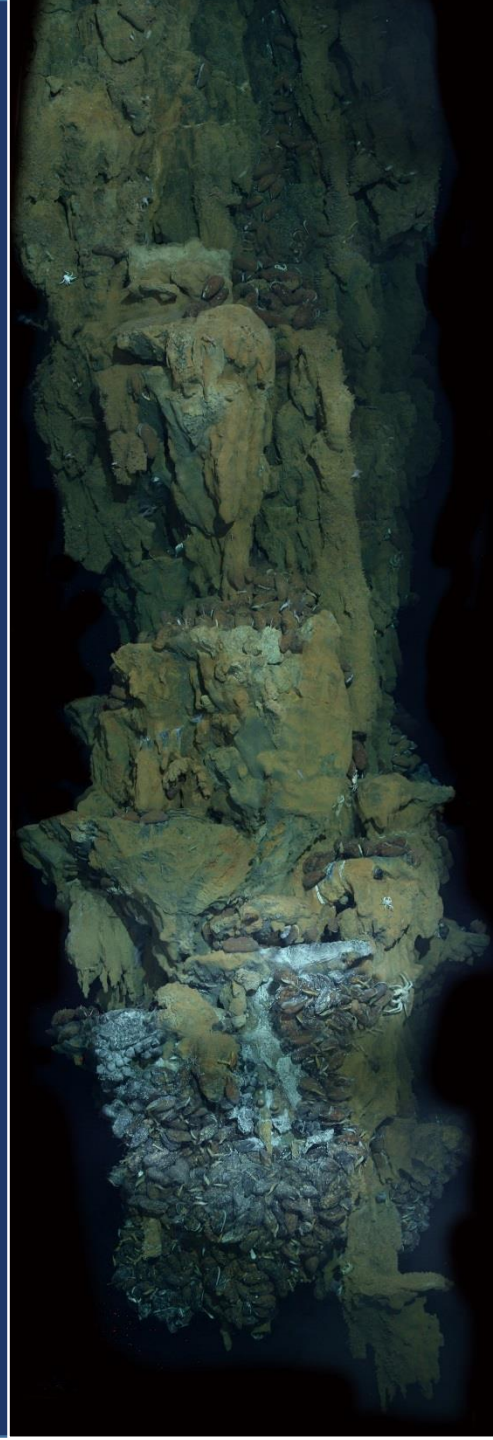
## REQUEST FOR INPUT – UNTIL JANUARY 1, 2017

All interested parties are invited to provide input.

Suggestions on how the Plan should be structured and specific topic areas that should be considered for inclusion are particularly encouraged.

Provide your input at:

<https://contribute.globalchange.gov/plan-ocean-research-coming-decade>





## ANTICIPATED TIMELINE

[illegible]

## MORE INFORMATION

For the prospectus and additional information:

[www.nsf.gov/geo/oce/orp](http://www.nsf.gov/geo/oce/orp).

For general inquiries on the Plan:

[oceanresearchplan@nsf.gov](mailto:oceanresearchplan@nsf.gov).